

SECTION 02712

GRANULAR FILTER MATERIAL

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes granular filter products and placement.

1.02 RELATED SECTIONS AND PLANS

- A. Section 02100 - Surveying
- B. Section 02200 - Earthwork
- C. Section 02280 - Biointrusion Barrier
- D. Part 6 - Statement of Work
- E. Part 8 - Environmental Health and Safety, and Training Requirements
- F. Part 9 - Quality Assurance Requirements

1.03 REFERENCES

- A. Latest version of American Society for Testing and Materials (ASTM) Standards:
 - 1. ASTM C 136. Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - 2. ASTM D 2487. Classification of Soils for Engineering Purposes (Unified Soil Classification System).

1.04 SUBMITTALS

- A. For each source of granular filter material, submit the following to the Construction Manager within 60 calendar days from Notice to Proceed for review:
 - 1. the source of the granular filter material along with certification from the supplier that the granular filter material meets the material requirements of this Section including the test results from ASTM C 136 and ASTM D 2487 on granular filter material; and
 - 2. a 50-pound representative sample of the granular filter material.

- B. Provide list of equipment and description of construction methods for placement of granular filter material in the Earthwork Work Plan specified in Section 02200.

1.05 HEALTH AND SAFETY REQUIREMENTS

- A. Environmental, health and safety, and other training requirements shall be as specified in Part 8 of the Contract Documents.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Furnish granular filter material consisting of homogeneous angular or crushed material that is relatively free of deleterious material such as metal, concrete, construction debris, or organic matter.
- B. Furnish granular filter material classified as SW or SP in accordance with the Unified Soil Classification System (per ASTM D 2487), and having a gradation (per ASTM C 136) that meets the following requirements:

| <u>Sieve</u> | <u>Total Percent Passing</u> |
|--------------|------------------------------|
| 2 in. | 100 |
| 3/4 in. | 80 - 100 |
| 1/2 in. | 70 - 85 |
| No. 4 | 55 - 70 |
| No. 8 | 50 - 65 |
| No. 50 | 15 - 35 |
| No. 60 | 0 - 30 |
| No. 200 | 0 - 5 |

2.02 EQUIPMENT

- A. Furnish equipment necessary to haul, place, spread, and compact granular filter materials.

PART 3 EXECUTION

3.01 PLACEMENT

- A. Do not place granular filter material until CQC Consultant has completed conformance evaluation of the granular filter material and performance evaluation of previous work, including evaluation of the Contractor's survey results of previous work.
- B. Construct the granular filter material to the thicknesses, and limits shown on the Construction Drawings.
- C. Place the granular filter material directly on the biointrusion barrier with choke stone which is constructed in accordance with Section 02280.
- D. Place the granular filter material in one loose lift.
- E. Compact the granular filter material by tracking with a dozer or other equipment approved by the Construction Manager. Compact with at least two passes of compaction equipment. Use portable compaction equipment in constricted locations and adjacent to structures.
- F. Dust control shall be in accordance with Part 6.

3.02 CONSTRUCTION QUALITY REQUIREMENTS

- A. The CQC Consultant will perform conformance testing on the granular filter material to establish compliance with this Section. The conformance testing to be performed and the testing frequencies are given in the Construction Quality Assurance Plan, referenced in Part 9 of the Contract Documents.

3.03 SURVEY CONTROL

- A. Survey the limits and elevations of the top of the granular filter material in accordance with Section 02100.

3.04 TOLERANCE

- A. Construct the granular filter to within -0.1 to +0.5 feet of the elevations and to within ± 0.1 feet of the thicknesses shown on the Construction Drawings.

[END OF SECTION]